

A REVIEW OF THE GENUS *PHYSOCORYNA*
GUÉRIN-MÉNEVILLE, 1844
(COLEOPTERA: CHRYSOMELIDAE: HISPINAE)

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Abstract.—The species of *Physocoryna* are reviewed and a key to the three species is presented. A lectotype is designated for *P. parvula* Weise.

Key words: Physocoryna; Hispinae; Chrysomelidae.

The genus *Physocoryna* contains three species (Uhmann 1957). Identifications have been based on descriptions or previously identified material.

The name *Physocoryna* first appeared in Chevrolat (1837) and contained three species names (*clavicornis* Dejean, *costata* Dejean, and *scabra* Dejean). All of these names are *nomina nuda* since there were no species descriptions or indications with the names. *Physocoryna* was validated by Guérin-Méneville (1844) when he described the new species *scabra* from Brazil. Weise (1921) described *parvula* from Paraguay. Pic (1925) described *expansa* from French Guiana. Uhmann (1932) synonymized *Octotoma tessellata* Maulik with *P. scabra* and described *dilatata* from Brazil. Uhmann (1937) transferred *dilatata* to *Acritispa* Uhmann.

The only other taxonomic reference to *Physocoryna* was Baly (1885) where plate 4, figure 3 was mislabeled as *P. scabra*. That text is correct in stating that the species is *Brachycoryna pumila* Guérin-Méneville.

The authorship of *Physocoryna* has been attributed to three authors. Chevrolat (1837) does not meet the requirements of ICZN (1985) Article 12(a), so the name may not be attributed to him. Chapuis (1875) published a description of the genus but gave the authorship to Chevrolat. Gemminger & von Harold (1876) and Donckier (1899) attempted to correct this error but gave the authorship to Chapuis apparently overlooking Guérin-Méneville (1844). Guérin-Méneville (1844) is the author since he provided an indication of the genus by attaching *Physocoryna* to the new species *scabra* [ICZN (1985) Article 2(b)6].

The genus *Physocoryna* belongs to the tribe Uroplatini. The tribe contains 32 genera (Uhmann 1957). *Physocoryna* can be distinguished by the very short, 7-segmented, clavate antennae, the eight rows of elytral punctures, the symmetrical elytral sculpture, and the elytral costae being irregular and tuberculate.

For this study, measurements were taken with an ocular micrometer. Pronotal length and width were taken along the midlines. Elytral width was measured at the humeri. Elytral length was measured from the base to the apex. Total length was measured from the base of the antennae to the apex of the elytra. In recording label data from type specimens, a slash (/) divides data on different labels. A question mark (?) in recorded label data indicates unreadable writing.

Physocoryna Guérin-Ménéville

Physocoryna Guérin-Ménéville 1844:279; Weise 1910:145, 1911a:30, 1911b:43; Uhmman 1933:80, 1937:336; Monrós & Viana 1947:256; Uhmman 1957:115; Seeno & Wilcox 1982:60; Staines 1989:343.

Physocoryna Chevrolat. Chapuis 1875:312 (Unavailable name [ICZN (1985) Article 8]).

Physocoryna Chapuis. Gemminger & von Harold 1876:3610; Donckier 1899:572; Blackwelder 1946:729; Papp 1953:90 (Invalid designation [ICZN (1985) Article 50]).

Type species. *P. scabra* Guérin-Ménéville (type by monotypy).

Generic description. Body elongate, attenuate. Head: small; medial sulcus absent; vertex with triangular depression. Antennae: clavate, very short; 7-segmented; segments I–III similar in size, as wide as long or III slightly longer than I or II; IV–VI transverse or IV and VI laterally compressed; VII much wider than preceding, oval, with whorls of setae, hirsute. Pronotum: tooth present in each anterior angle; transverse; covered with irregular pits. Elytra: parallel-sided; enlarged in exterior apical angle; apex almost truncate; surface with 8 rows of strong, confused punctures; puncture row 1 visible on basal half, interrupted by tubercles; sculpturing symmetrical; lateral and apical margins serrate. Venter: prosternum broad. Legs: short; tarsi wide, segment 1 short, 2 twice as large as 1, 3 as long as the preceding two combined, 4 slightly exceeding lobes of 3.

KEY TO THE SPECIES OF *PHYSOCORYNA*

1. Elytra greatly expanded to apex; pronotum without medial callus; pronotum with basal impression; antennal segment VII triangular; larger species (7 mm); French Guiana, Panama, and Costa Rica *expansa* Pic
- Elytra not greatly expanded to apex; pronotum with medial callus; pronotum without basal impression; antennal segment VII not triangular; smaller species (less than 6 mm) 2
2. Antennal segments IV–VI transverse; lateral margins of pronotum parallel-sided; anterior angle of pronotum with two teeth; larger species (4–5.5 mm); Argentina, Brazil, Colombia, Paraguay, and Peru *scabra* Guérin-Ménéville
- Antennal segments IV and VI laterally compressed; lateral margins of pronotum sinuate; anterior angle of pronotum with large rounded tooth; smaller species (3–3.6 mm); Brazil, Paraguay *parvula* Weise

Physocoryna expansa Pic

Physocoryna expansa Pic 1925:1 (Holotype: Cayenne/Type/Type/Museum Paris Coll. M. Pic (blue label)/*Physocoryna expansa* n. sp. [MNHN]). Uhmman 1937:337; Blackwelder 1946:729; Uhmman 1950:268; Papp 1953:90; Uhmman 1957:115.

Description. Black with reddish-brown markings; abdomen reddish; legs reddish with black markings. Head: vertex punctate; alutaceous; medial fovea present. Antennae: greatly expanded at apex; segment I subglobose, slightly compressed laterally; II small, transverse; III cylindrical, longer than II or IV; IV short, transverse; V transverse, longer than IV; VI short, transverse; VII large, triangular, compressed laterally. Pronotum: slightly transverse; convex; deeply, roughly punctate; anterior margin distinctly dentate; basal impression present; lateral margin bisinuate; each

anterior angle with rounded tooth present; distinct notch present just behind anterior angle; surface alutaceous; pronotal length 1.1 mm ($n = 4$); pronotal width 1.6 mm. Scutellum: reddish; quadrate; alutaceous. Elytra: greatly dilated at apex; exterior apical angle tridentate and laminate; lateral and apical margins dentate, lateral margins more dentate apically; irregular costae and plicae present over surface; humeri pronounced, with triangular oblique carina; elytral length 4.9 mm; elytral width 2.4 mm. Legs: protibiae sinuate, rounded apically, punctate; femora punctate, metafemora serrate on ventral margin. Venter: metasternum punctate laterally, reddish brown in middle, black laterally; mesosternum punctate medially; five visible abdominal sterna. Total length: 6.3–7.0 mm.

Host plant. Unknown.

Range. French Guiana, Panama, and Costa Rica.

Material examined. no locality (DEI). COSTA RICA, **Guanacaste:** Est. Pitilla, 700 m, 9 km S Sta. Cecilia, x.1990 (INBIO). **Heredia:** La Selva Biological Station, 3 km. south Rio Viejo, 10°26'N, 84°01'W, 26.vii.1998 (HAHC). FRENCH GUIANA: Cayenne (MNHW). PANAMA: Barro Colorado Isl., 23.vi.1962 (AMNH). Total: 5.

Physocoryna parvula Weise

Physocoryna parvula Weise 1921:269 (Lectotype (here designated): Paraguay K. Fiebrig/? C 8171 (folded)/Weise det./TYPUS (red label)/*Physocoryna parvula* m/Syntypus (red label)/Coll. DEI Eberswalde/LECTOTYPE *Physocoryna parvula* Weise des. C. L. Staines 1997 (red label) [DEI]). Blackwelder 1946:729; Papp 1953:90; Uhmann 1957:115.

Description. Body yellowish with black markings. Head: vertex with triangular fovea which becomes a carina; surface micropunctate, slightly alutaceous around fovea; frons projecting; carina present on outer margin of each eye; two rows of setae present on inner margin of each eye. Antennae: segment I transverse, slightly compressed laterally; II transverse; III cuspidate; IV–VI short, transverse, laterally compressed; VII oval, large club, laterally compressed, hirsute, banded dark and yellow. Pronotum: yellow; transverse; convex; with large irregular, dark punctures; medial callus present; lateral margins sinuate; each anterior angle with large, rounded tooth; surface micropunctate; pronotal length 0.6 ($n = 4$); pronotal width 0.9 mm. Scutellum: yellow; quadrate; micropunctate. Elytra: lateral margins strongly dentate; exterior apical angle with small dentate lamina; surface micropunctate; elytral punctures irregular; elytral length 2.7 mm; elytral width 1.3 mm. Legs: femora punctate; protibiae flared to apex. Total length: 3.0–3.6 mm.

Notes. Weise (1921) did not indicate the number of specimens used in the description of *parvula*. Wendt (pers. comm.) indicated that Weise's types from 1910 to 1926 are deposited in Naturhistoriska Riksmuseet (Stockholm) and that no other *parvula* specimens are present in the ZMHB. Lindskog (pers. comm.) found the pin with Weise's label of *P. parvula* but the specimen card only contained one leg. The DEI specimen is clearly labeled as a Weise syntype, the label data matches that of the original description and is hereby designated as the lectotype.

Host plant. Unknown.

Range. Brazil and Paraguay.

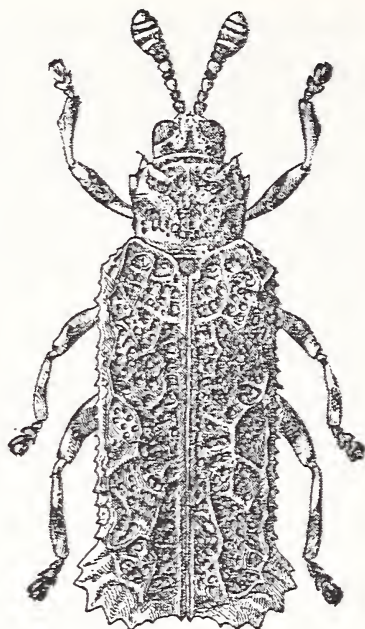


Fig. 1. *Physocoryna scabra* habitus.

Material examined. BRAZIL, Bahia (NHMW). São Paulo: São Paulo, 1–5.v.1961 (DEI). PARAGUAY: no further data (DEI). Total: 4.

Physocoryna scabra Guérin-Ménéville
(Fig. 1)

Physocoryna scabra Guérin-Ménéville 1844:279 (Type depository unknown). Chapuis 1875:312; Gemminger & von Harold 1876:3610; Donckier 1899:572; Weise 1911a:30, 1911b:43; Bondar 1930a:49, 1930b:179, 1931:74; Maulik 1937:139; Blackwelder 1946:729; Monrós & Viana 1947:258; Uhmman 1950:267; Papp 1953:90; Costa Lima 1955:211; Uhmman 1957:115, 1958:425; Godofredo *et al.* 1968:450.

Octotoma tessellata Maulik 1929:85 (Holotype: Type (white circle with red border)/BRAZIL Bahia 1928 on leaves of Canavalia Dr. G. Bondar 1227/Pres. by Imp. Bur. Ent. Brit. Mus. 1929–178/Octotoma tessellata M. S. Maulik TYPE 1928 [BMNH]). Bondar 1930a:49, 1930b:182; Uhmman 1932:266; Costa Lima 1936:327; Guérin 1953:102; Costa Lima 1955:211.

Description. Color yellow castanaceous with blackish maculae or entirely reddish-brown; parallel, compact, slightly convex, almost rectangular. Head: rugose; transverse; with short, deep medial fovea; medial carina present near base of antennae; two rows of setae present behind each eye; sulcus present on outer margin of each eye; surface micropunctate; frons projecting. Antennae: shorter than head and pronotum combined; segment I subglobose, longer than II; II transverse; III cuspidate, longer than II or IV; IV–VI transverse, V longer than IV or VI, IV and VI laterally

compressed; VII much wider, oval, with whorls of golden setae; I–VI longitudinally striate; I–V yellow castanaceous; VI–VII with paler irregular areas. Pronotum: quadrangular; parallel-sided; basal margin bisinuate; each anterior angle with two small projections present; surface finely punctate, with a smooth and shining central callus and lateral series of shallow pits; pronotal length 0.9–1.0 mm ($n = 30$); pronotal width 1.0–1.3 mm. Scutellum: transverse. Elytra: finely granulose; wider than pronotum; with three irregular, branched carinae situated before, after, and in the middle; sutural margin elevated; rows of punctures irregular and interrupted by the carinae; lateral margins asymmetrically dentate; exterior apical angle with dentate lamina; elytral length 3.7–4.0 mm; elytral width 1.7–2.1 mm. Legs: short, robust; tibiae flared to apex, mesotibiae somewhat curved; metatibiae long; meso- and metafemora punctate; metafemora serrate on inner margin. Venter: mesosternum longitudinally torulose in middle, sides micropunctate; metasternum rugose at sides, smooth in middle. Total length: 4.0–5.5 mm.

Notes. One specimen in the NHMW is labeled as from the Guérin-Ménéville collection. While it is impossible to determine if it is from the original series it does indicate that the species is the one Guérin-Ménéville described.

Larval host plants. *Canavalia* sp., *C. ensiformis* (L.) DC., *Cymbosema* sp., *Dioclea* sp., *Phaseolus* sp. (Fabaceae); and *Stimatophyllum* sp. (Malpighiaceae) (Bondar 1931; Godofredo *et al.* 1968).

Range. Brazil, Colombia, Peru, Paraguay, and Argentina.

Material examined. ARGENTINA, **Misiones:** v.1947 (USNM); San Javier, 4.vii.1937 (USNM). BRAZIL: no further data (DEI, MCZC, NHMW). Chapada (CMNH); Barro Preto (USNM). Bahia (BMNH, DEI, USNM). **Goiás:** Jathay (NHMW). Jathay, ix–xi. 1987 (DEI), 1895–1896 (USNM); Rio Verde (DEI). **Pará:** Ithanhaem (DEI); Curua R., E of Santarem, 2°S54'W, IV-30–63 (MCZC). **Rio Grande do Sul:** 23.x.1967, 24.x.1965 (DEI). **Rio de Janeiro:** no further data (NHMW); Laguna de Sacuaresma, ix.1884 (USNM). **Santa Catarina:** Nova Teutonia, 20.ii.1935, 23.xi.1935 (DEI); 10-27.x.1942 (AMNH). COLOMBIA, **Meta:** Restrepo, 2.x.1965 (USNM). FRENCH GUIANA: no further data (USNM). PARAGUAY, **Dep. Itupúa Cordillera:** San Rafael Estancia Parabel, 20.ii.1991 (CLS). PERU, **Junín:** Satipa (USNM). **San Martín:** Tarapoto (USNM). TOTAL: 47.

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